# Draft Environmental Assessment

Callahan Creek
Unconsolidated Fill Removal

**Lincoln County, Montana** 

124 Permit LICO-124-1L-17

February 2017



# Draft Environmental Assessment MEPA CHECKLIST

# PART I. PROPOSED ACTION DESCRIPTION

#### 1. Type of proposed state action:

Montana Fish, Wildlife & Parks (FWP) proposes to issue a 124 permit to Lincoln County for the removal of unconsolidated sand and gravel placed by the county in January 2016.

#### 2. Agency authority for the proposed action:

87-5-502 Mont. Code Ann. Notice of construction or hydraulic projects. An agency of state government, county, municipality, or other subdivision of the state of Montana, hereafter called applicant, shall not construct, modify, operate, maintain, or fail to maintain any construction project or hydraulic project which may or will obstruct, damage, diminish, destroy, change, modify, or vary the natural existing shape and form of any stream or its banks or tributaries by any type or form of construction without first causing notice of such planned construction to be served upon the department (Fish, Wildlife & Parks) on forms furnished by the department as soon as preliminary plans are completed, but not less than 60 days prior to commencement of final plans for construction. Such notice shall include detailed plans and specifications of so much of said project as may or will affect any such stream in any manner specified above.

**87-5-503 Mont. Code Ann. Investigation of construction plans.** The department shall promptly examine and investigate all such plans. Should the department determine the plans and specifications furnished with any such application technically insufficient, the department shall so notify the applicant and may render aid in preparing adequate plans and specifications.

**87-5-504 Mont. Code Ann. Notice of department findings and alternative plans.** Within 30 days after the receipt of such plans, the department shall notify the applicant whether or not such construction project or hydraulic project will adversely affect any fish or game habitat. If the department notifies the applicant that such construction will adversely affect any fish or game habitat, it shall accompany such notice with recommendations or alternative plans which will eliminate or diminish such adverse effect.

# 3. Name of project:

Callahan Creek Unconsolidated Fill Removal

#### 4. Name, address, and phone number of project sponsor:

Lincoln County 512 California Avenue Libby, MT 59923 406-293-7731

#### 5. Anticipated schedule:

Estimated construction commencement date: 3/1/2017 Estimated completion date: 5/30/2017

Status of project design (% complete): 0%

6. Location affected by proposed action:

Lincoln County, T13N R34W S13

7. Project size:

	<u>Acres</u>		<u>Acres</u>
(a) Developed: Residential	0	(d) Floodplain	5.2 acres
Industrial	0	(e) Productive:	
(existing shop area)		Irrigated cropland	<u> </u>
(b) Open Space/	<u> </u>	Dry cropland	<u> </u>
Woodlands/Recreation		Forestry	<u> </u>
(c) Wetlands/Riparian	24,393 sf	Rangeland	0
Areas		Other	<u> </u>

- 8. Listing of any other local, state, or federal agency that has overlapping or additional jurisdiction:
  - (a) Permits (Permits will be filed at least 2 weeks prior to project start.):

Agency Name	Permits
Lincoln County Floodplain Administrator	Floodplain
US Corps of Engineers	404
Montana Department of Environmental Quality (DEQ	)) 318
DEQ	<b>Construction Storm Water</b>

(b) Funding:

Agency Name	Funding Amount
Lincoln County	Unknown

(c) Other overlapping or additional jurisdictional responsibilities:

Agency Name	Type of Responsibility
US Environmental Protection Agency	Enforcement
US Army Corps of Engineers	Enforcement

9. Narrative summary of the proposed action or project, including the benefits and purpose of the proposed action:

Excerpted from 124 application: In December of 2015, rain on snowpack resulted in major flooding on Callahan Creek. Unpermitted actions were taken by Lincoln County in January 2016. These actions included complete large woody debris removal, approximately 350 lineal feet of emergency road repair, and bed load ditching and diking of approximately 22,000 cubic yards of substrate along approximately .9 mile of channel. The original action was accomplished to lower the thalweg elevation from an earlier Flood Insurance Study in 2006 (Figure 1). The action was in violation of Section 404 of the US Clean Water Act, Section 10 of the US Rivers and Harbors Act, Montana Stream Protection Act (87-5-502 MCA), and Section 318 of Montana Clean Water Act.

The proposed project will remove approximately 22,000 cubic yards of unconsolidated substrate placed in the bed and floodway of Callahan Creek. Removed material will be stockpiled out of the flood plain. Excavators and dump trucks will be used to load and haul the substrate. There will be no work in the active stream channel. This type of substrate is highly mobile during less than peak flow events. If mobilized, the deposition downstream could have significant negative impacts on flood flows, wetlands, and fish habitat. The purpose of the project is to remove stockpiled substrate from the Callahan Creek floodplain. There are 5 areas within a 1-mile reach of Callahan Creek that consist of this stockpiled substrate (Figures 2 and 3). Potential benefits of the project are to reduce likelihood that diked substrate will mobilize downstream, which could cause additional flood risk and fish migration barrier due to aggraded material. Additionally, this is phase one of a multiphased project to reestablish proper pattern, profile, and dimensions of Callahan Creek.

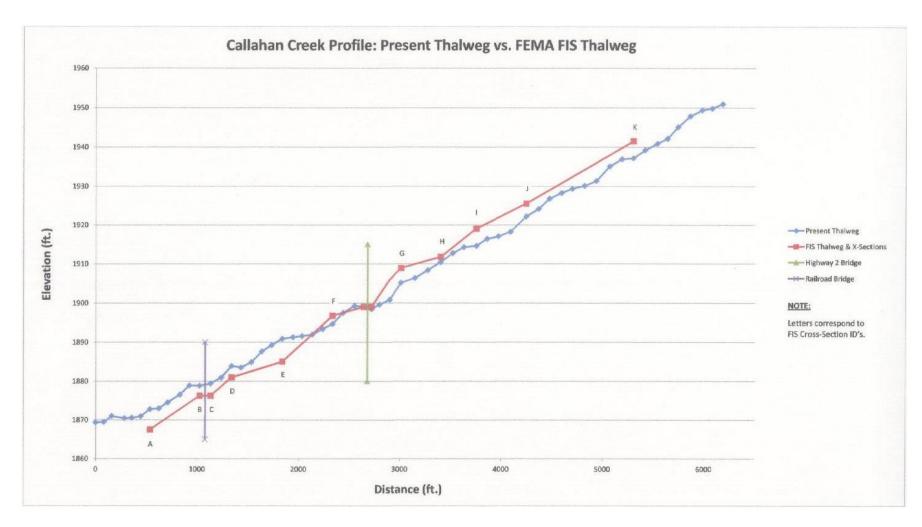


Figure 1. Callahan Creek longitudinal profile of project area from 2006 FEMA Flood Insurance Study and 2016 HDR survey.

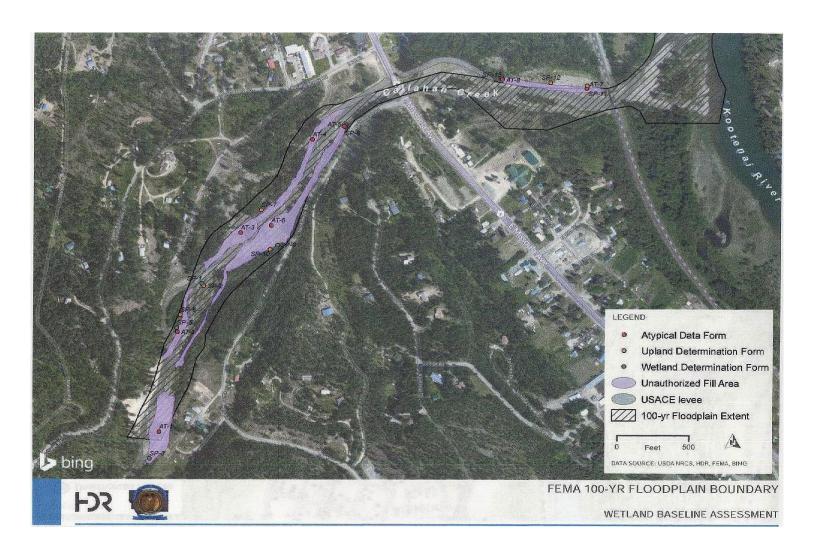


Figure 2. Stockpiled substrate from unauthorized excavation activity in Callahan Creek 2016.



Figure 3. Typical stockpiling on Callahan Creek (AT-5 from Figure 2) that led to violation and proposed action.

10. Description and analysis of reasonable alternatives (including the no-action alternative) to the proposed action, whenever alternatives are reasonably available and prudent to consider, and a discussion of how the alternatives would be implemented:

# **<u>Alternative A:</u>** No Action

FWP does not issue a 124 permit and high flows mobilize the substrate, which is redeposited along the entire reach of Callahan Creek to the confluence with the Kootenai River. Deposition will raise the channel elevations. An increase in channel elevation might adversely affect fish passage, especially during low flow periods. An increase in channel elevation could cause an increase in the stage elevation of the defined100-year flood zone and potentially affect properties currently not within the defined flood plain.

# **Alternative B:** Proposed Action

FWP issues a 124 permit and the 22,000 cubic yards of substrate are removed. The channel elevations are not altered by additional bed load. The flood plain is not altered by elevation increase in the channel. Fish passage and habitat are not altered by the bed load depositions. Phase Two (stream reconstruction) can begin after high flows subside and Phase Three (floodplain management plan) will be initiated.

# PART II. PREDICTED ENVIRONMENTAL OUTCOMES

1. Evaluation of the impacts of the alternatives, including secondary and cumulative impacts on the physical and human environment.

#### A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES	RESOURCES				IMPACT			
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index		
a. Soil instability or changes in geologic substructure?				Х		1a.		
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?			х			1b.		
c. Destruction, covering, or modification of any unique geologic or physical features?				Х	Х	1c.		
d. Changes in siltation, deposition, or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?				X	Х	1d.		
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?				Х	Х	1e.		
f. Other:			х			1f.		

#### Narrative description and evaluation of the cumulative and secondary effects on Land Resources:

- 1a. The intended project will remove 22,000 cubic yards of fluvial substrate excavated and stockpiled from the bed of Callahan Creek in January 2016. These boulder/cobble/gravels are loose and easily mobilized by hydraulic forces. Removal prior to a flood event will reduce downstream bed load deposition. Large scale substrate removal will increase the cross-sectional area of the stream at lower flows and may increase uncontrolled meandering and areas of erosion against banks and aggradation while stream approaches equilibrium. In addition, woody debris was completely removed from the entire reach. Thus, natural stream flow processes will continue to cause uncontrolled meandering and may create new accumulations until the next phase of this project to improve pattern, profile, and dimensions of the stream can be completed.
- 1b. Initial unauthorized activity removed the veneer of fine substrate available for vegetative growth prior to this proposed project. Removal of the stockpiled substrate may leave behind some amount of sandy gravel which could be available for vegetation.
- 1c. Initial channel excavation removed significant amounts of woody debris and live vegetation. This project will not improve the situation. Subsequent phases of reconstruction should create opportunity to improve vegetation throughout the project.
- 1d. Large scale substrate removal will increase the cross-sectional area of the stream at lower flows and may increase uncontrolled meandering and areas of erosion and aggradation while stream approaches equilibrium. In addition, woody debris was completely removed from the entire reach. Thus, natural stream flow processes will initially cause considerable turbidity and continue to cause uncontrolled meandering. This may create additional bank stress (erosion) shifting substrate accumulations until the next phase of this project to improve pattern, profile, and dimensions of the stream can be completed. Callahan Creek delta at the Kootenai River has increased in area and elevation partly due to deposition from Callahan Creek (natural and anthropogenic) and partially from diminished erosion due to reduced peak flows on the Kootenai River from Libby Dam. Removal of mobile substrate could reduce available sources of bed load and potentially slow the expansion of the delta and increases in elevation that lead to subsurface flows during low water.

- 1e. Large scale substrate removal will increase the cross-sectional area of the stream at lower flows and may increase uncontrolled meandering and areas of erosion and aggradation while stream approaches equilibrium. In addition, woody debris was completely removed from the entire reach. Thus, natural stream flow processes will initially cause considerable uncontrolled meandering. This may create additional bank stress (erosion) shifting substrate accumulations that could put residents along the stream at risk of property damage until the next phase of this project to improve pattern, profile, and dimensions of the stream can be completed.
- 1f. Cumulative and secondary effects on Land Resources identified in this review are potentially beneficial as long as Lincoln County follows through on stream remediation and a floodplain management plan.

2. AIR	IMPACT					
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Emission of air pollutants or deterioration of ambient air quality? (Also see 13c.)			х			2a.
b. Creation of objectionable odors?			Х			2b.
c. Alteration of air movement, moisture, or temperature patterns, or any change in climate, either locally or regionally?		Х				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		Х				
e. For P-R/D-J projects, will the project result in any discharge, which will conflict with federal or state air quality regs? (Also see 2a.)		NA				
f. Other:						

# Narrative description and evaluation of the cumulative and secondary effects on Air Resources:

- 2a. Depending on the season when the excavation, loading, and hauling occur, dust could be a result. If this occurred, the increase in particulate would be short term. If completed before spring runoff, the materials will be moist and dust should not be problem.
- 2b. Construction equipment is driven with diesel engines. During construction and removal, there may be a noticeable increase in diesel odors. The increase will be short term.

No cumulative or secondary effects on Air were identified in this review.

3. WATER	IMPACT						
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index	
a. Discharge into surface water or any alteration of surface water quality, including but not limited to temperature, dissolved oxygen, or turbidity?			Х			За.	
b. Changes in drainage patterns or the rate and amount of surface runoff?		Х					
c. Alteration of the course or magnitude of floodwater or other flows?				Х		3c.	
d. Changes in the amount of surface water in any water body or creation of a new water body?		х					
Exposure of people or property to water-related hazards such as flooding?				Х		3e.	
f. Changes in the quality of groundwater?		Х					
g. Changes in the quantity of groundwater?		Х					
h. Increase in risk of contamination of surface or groundwater?			Х			3h.	
i. Effects on any existing water right or reservation?		х					
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		х					
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		х					
For P-R/D-J, will the project affect a designated floodplain? (Also see 3c.)		NA					
m. For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a.)		NA					
n. Other:							

#### Narrative description and evaluation of cumulative and secondary effects on Vegetation:

- 3a. Excavation of stockpiled material will be completed without any equipment accessing the stream channel. The stream channel might be affected by the removal if some of the stockpiled substrate falls into the stream. It is expected to be minor and short term in duration.
- 3c. Large scale substrate removal will restore cross-sectional area to the flood prone zone, but it also may increase uncontrolled meandering and areas of erosion and aggradation while stream approaches equilibrium. In addition, woody debris was completely removed from the entire reach. Thus, natural stream flow processes will initially cause considerable uncontrolled meandering. This may create additional bank stress (erosion) and shifting substrate accumulations until the next phase of this project to improve pattern, profile, and dimensions of the stream can be completed.
- 3e. Large scale substrate removal will restore cross-sectional area to the flood prone zone, but it also may increase uncontrolled meandering and areas of erosion and aggradation while stream approaches equilibrium. In addition, woody debris was completely removed from the entire reach. Thus, natural stream flow processes will initially cause considerable uncontrolled meandering. This may create additional bank stress (erosion) and shifting substrate

accumulations, which could then expose adjacent landowners to flooding and/or loss of property. Expect these stresses to continue until the next phase of this project to improve pattern, profile, and dimensions of the stream can be completed.

3h. Equipment will be required to be cleaned prior to entry to the construction zone, and all operators inside the floodplain will be required to have immediate access to hazardous materials cleanup kits.

Cumulative and secondary effects on water quality identified in this review can be mitigated by proceeding to the next phases of this project: 1) begin construction to improve pattern, profile, and dimensions of the stream; 2) complete a comprehensive floodplain management plan.

4. VEGETATION	IMPACT						
Will the proposed action result in?	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index	
a. Changes in the diversity, productivity, or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?			Х		X	4a & b.	
b. Alteration of a plant community?			Х		Х	4a & b.	
c. Adverse effects on any unique, rare, threatened, or endangered species?		Х					
d. Reduction in acreage or productivity of any agricultural land?		Х					
e. Establishment or spread of noxious weeds?		Х					
f. For P-R/D-J, will the project affect wetlands or prime and unique farmland?		Х					
g. Other:							

#### Narrative description and evaluation of the cumulative and secondary effects on Vegetation:

4a & b. There have been minor impacts to vegetation by the excavation and stockpiling. Approximately 0.56 acre of wetlands were disturbed. Removing the stockpiled materials may expose other wetland areas. Vegetation, primarily undisturbed root systems, have regenerated over the past growing season. This natural regeneration will most likely revegetate the disturbed areas.

No cumulative or secondary effects on Vegetation were identified in this review.

5. FISH/WILDLIFE	IMPACT					
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Deterioration of critical fish or wildlife habitat?				Х	Х	5a, e & f
b. Changes in the diversity or abundance of game animals or bird species?		Х				
c. Changes in the diversity or abundance of nongame species?		Х				
d. Introduction of new species into an area?		Х				
e. Creation of a barrier to the migration or movement of animals?				Х	Х	5a, e & f
f. Adverse effects on any unique, rare, threatened, or endangered species?				Х	Х	5a, e & f
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest, or other human activity)?				Х	Х	5g
h. For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f.)		NA				
i. For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d.)		NA				
j. Other:						

#### Narrative description and evaluation of the cumulative and secondary effects on Fish and Wildlife:

5a, e & f. Callahan Creek has documented populations of three Species of Concern: bull trout, west slope cutthroat, and red band trout. Bull trout are listed as "threatened" by the USFWS. Bull trout use the project area for foraging, migration, and potentially overwintering. Large scale substrate removal will restore cross-sectional area to the flood-prone zone and may for a time maintain water depth needed for upstream migration during low water periods. But, it also may increase uncontrolled meandering and areas of erosion and aggradation while stream approaches equilibrium. In addition, woody debris was completely removed from the entire reach. Thus, natural stream flow processes will initially cause considerable uncontrolled meandering. This may create additional bank stress (erosion) and shifting substrate accumulations, which could cause additional deposition that could lead to subsurface water and therefore a migration barrier near the confluence with Kootenai River. In addition, aquatic insects are unlikely to reestablish in the unstable, unauthorized activity area, and westslope cutthroat trout and redband trout are unlikely to utilize the area with no food source. Expect these stresses to continue until the next phase of this project to improve pattern, profile, and dimensions of the stream can be completed.

5g. Migrating bull trout may be negatively affected by the noise and commotion of substrate removal if completed during migration periods. Stress to migrating bull trout can be reduced by timing activities outside migration periods.

Cumulative and secondary effects on water quality identified in this review can be mitigated by proceeding to the next phases of this project: 1) begin construction to improve pattern, profile, and dimensions of the stream; 2) complete a comprehensive floodplain management plan.

# **B. HUMAN ENVIRONMENT**

6. NOISE/ELECTRICAL EFFECTS	IMPACT						
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index	
a. Increases in existing noise levels?			Х			6a.	
b. Exposure of people to severe or nuisance noise levels?		Х					
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		x					
d. Interference with radio or television reception and operation?		Х					
e. Other:							

Narrative description and evaluation of the cumulative and secondary effects on Noise/Electrical Effects:

6a. There will be an increase in noise levels in the immediate area during construction activities. This will include noise from heavy equipment operation. The impact will be short term.

No cumulative or secondary effects on Noise/Electrical Effects are expected.

7. LAND USE		IMPACT				
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		х				
b. Conflict with a designated natural area or area of unusual scientific or educational importance?		х				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		х				
d. Adverse effects on or relocation of residences?		х				
e. Other:						

#### Narrative description and evaluation of the cumulative and secondary effects on Land Use:

No cumulative or secondary effects on Land Use are expected.

8. RISK/HEALTH HAZARDS	IMPACT						
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index	
Risk of an explosion or release of hazardous substances (including but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?		х					
b. Affect an existing emergency response or emergency evacuation plan, or create a need for a new plan?				х	Х	8b.	
c. Creation of any human health hazard or potential hazard?		Х					
d. For P-R/D-J, will any chemical toxicants be used? (Also see 8a.)		NA					
e. Other:							

#### Narrative description and evaluation of the cumulative and secondary effects on Risk/Health Hazards:

8b. Large scale substrate removal will restore cross-sectional area to the flood prone zone and may for a time relieve need for a new flood hazard study. But the substrate removal, if not followed by quality stream reconstruction to restore proper profile, pattern, and dimensions of the Callahan Creek, may increase uncontrolled meandering and areas of erosion and aggradation while stream approaches equilibrium. In addition, woody debris was completely removed from the entire reach. Thus, natural stream flow processes will likely cause considerable uncontrolled meandering during average-to-high flow events. This may create new bank stress (erosion) and shifting substrate accumulations, which could cause additional effects to stream banks. Expect these stresses to continue until the next phase of this project to improve pattern, profile, and dimensions of the stream can be completed.

9. COMMUNITY IMPACT Will the proposed action result in:	IMPACT							
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		х						
b. Alteration of the social structure of a community?		Х						
c. Alteration of the level or distribution of employment or community or personal income?		х						
d. Changes in industrial or commercial activity?		Х						
Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		Х						
f. Other:								

#### Narrative description and evaluation of the cumulative and secondary effects on Community Impact:

No cumulative or secondary effects on Community Impact were identified in this review. Removal may have a slight positive impact.

10. PUBLIC SERVICES/TAXES/UTILITIES Will the proposed action result in:	IMPACT							
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index		
a. An effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		×						
b. An effect upon the local or state tax base and revenues?		Х						
c. A need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		×						
d. An increased use of any energy source?		Х						
e. Define projected revenue sources.		NA						
f. Define projected maintenance costs.		NA						
g. Other:								

Narrative description and evaluation of the cumulative and secondary effects on Public Services/Taxes/Utilities:

No cumulative or secondary effects on Public Services/Taxes/Utilities were identified in this review.

11. AESTHETICS/RECREATION	IMPACT							
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index		
Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		Х				11a.		
b. Alteration of the aesthetic character of a community or neighborhood?		Х						
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)		Х						
d. For P-R/D-J, will any designated or proposed wild or scenic rivers, trails, or wilderness areas be impacted? (Also see 11a, 11c.)		NA						
e. Other:								

#### Narrative description and evaluation of the cumulative and secondary effects on Aesthetics/Recreation:

11a. Removal of the stockpiles and future restoration will restore the river channel to a natural condition, an aesthetic improvement from the current view of the stockpiles.

12. CULTURAL/HISTORICAL RESOURCES	IMPACT					
Will the proposed action result in:	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Destruction or alteration of any site, structure, or object of prehistoric, historic, or paleontological importance?	Х					12a.
b. Physical change that would affect unique cultural values?		Х				
c. Effects on existing religious or sacred uses of a site or area?		Х				
d. For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12a.)		NA				
e. Other:						

#### Narrative description and evaluation of the cumulative and secondary effects on Cultural/Historical Resources:

12a. Channel areas have been inundated periodically for decades. No cultural/historical resources were identified or have been previously disturbed by natural or anthropogenic processes.

No cumulative or secondary effects on Cultural/Historical Resources were identified in this review.

#### SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE  Will the proposed action, considered as a whole:	IMPACT							
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index		
A. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)				Х	Х	13a.		
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?		х						
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard, or formal plan?		x						
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		x						
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		x						
f. For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e.)		NA						
g. For P-R/D-J, list any federal or state permits required.		NA						

#### Narrative description and evaluation of the cumulative and secondary effects on Significance Criteria:

13a. Large scale substrate removal will restore cross-sectional area to the flood prone zone and may for a time relieve need for a new flood hazard study. But the substrate removal, if not followed by quality stream reconstruction to restore proper profile, pattern, and dimensions of the Callahan Creek, may increase uncontrolled meandering and areas of erosion and aggradation while stream approaches equilibrium. In addition, woody debris was completely removed from the entire reach. Thus, natural stream flow processes will likely cause considerable uncontrolled meandering during average to high flow events. This may create new bank stress (erosion) and shifting substrate accumulations which could cause additional effects to stream banks. Expect these stresses to continue until the next phase of this project to improve pattern, profile, and dimensions of the stream can be completed.

Potentially substantial impacts (local streambank erosion, potential flooding, aggradation leading to subsurface flows during low water) have been identified, which could occur if the stockpiles were not removed. These impacts would directly impact the Callahan Creek's natural restoration process, function for fisheries for migration and foraging, reduce the presence of wetlands, and flood plain impacts.

Cumulative effects are generally positive and support the removal of the stockpiled materials.

# 2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

SPA permitting will require the removal during low flows, which will minimize potential future impacts. Applicant will be required to complete stream remediation as part of a future SPA permit.

# PART III. NARRATIVE EVALUATION AND COMMENT

The proposed project and environmental assessment indicate this is the first phase of a multi-phase project to reclaim proper pattern, profile, and dimensions of Callahan Creek. This first phase will have minor short-term impacts to fish habitat that may become substantial if proceeding phases are not carried out. No significant short-term impacts to fish, wetlands, or the environment were identified in the environmental review. Cumulative or secondary impacts to natural environment can be mitigated with the additional phases to include stream restoration and a floodplain management plan that would commence beginning at low flows near July.

#### PART IV. PUBLIC PARTICIPATION

#### 1. Public involvement:

The public will be notified in the following manners to comment on this draft EA, the proposed action, and the alternatives:

- Two public notices in each of these newspapers: Western News, Montanian.
- One statewide press release.
- Public notice on the Fish, Wildlife & Parks web site: http://fwp.mt.gov.

Copies of this environmental assessment will be distributed to the neighboring landowners and interested parties to ensure their knowledge of the proposed project.

This level of public notice and participation is appropriate for a project of this scope, having limited impacts, many of which can be mitigated.

#### 2. Duration of comment period:

In an effort to comply with 87-5-504, the department will notify the applicant within 30 days that the proposed project will not adversely affect fish and wildlife habitat. The public comment period will extend for 15 days. Written comments will be accepted until 5:00 p.m. on 3/15/2017 and can be mailed to the address below:

Montana Fish, Wildlife & Parks Attn: Mike Hensler 385 Fish Hatchery Road Libby, MT 59923

#### PART V. EA PREPARATION

# 1. Based on the significance criteria evaluated in this EA, is an EIS required? No

An EA is the appropriate level of analysis for this action since no significant long-term impacts to fish and wildlife habitat were identified. To comply with 87-5-504, the department will notify the applicant within 30 days that the proposed project will not adversely affect fish and wildlife habitat. The department received the Joint Application and supporting documentation on 2/6/17. The department will provide recommendations for minimizing short-term impacts to fish and wildlife habitat in a 124 permit provided to the Lincoln County.

# 2. Person responsible for preparing the EA:

Mike Hensler Fisheries Biologist 385 Fish Hatchery Road Libby, MT 59923 406-293-4161

# . List of agencies consulted during preparation of the EA:

Montana Fish, Wildlife & Parks
Fisheries Division
Legal Bureau
USFWS
USACOE
USEPA